

RESPONSE UNDER 37 C.F.R. § 1.116

EXPEDITED PROCEDURE – Art Unit 2829

Attorney Docket No. 108298770US

Disclosure No. 03-0874.00/US

REMARKS

Claims 17-37 are currently pending in this application. Claims 1-10 have been cancelled in this response without prejudice to pursuing these claims in a divisional, continuation, continuation-in-part, or other application. No claims have been added or amended in this response.

In the Final Office Action mailed July 12, 2006, claims 17-23 and 25-37 were rejected. More specifically, the status of the application in light of this Office Action is as follows:

- (A) Claims 17-23 and 25-37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,707,309 to Sato et al. ("Sato") in view of U.S. Patent No. 6,373,273 to Akram et al. ("Akram"); and
- (B) Claim 24 was allowed.

A. Response to the Section 103(a) Rejection

Claims 17-23 and 25-37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sato and Akram. As set forth in detail below, the combination of Sato and Akram cannot support a Section 103(a) rejection of claims 17-23 and 25-37 for at least the reason that the combination of these references fails to disclose or suggest all of the features of the claims.

1. Claim 17 is Directed to a Test Socket Having a Support Surface with a Plurality of Open Apertures Positioned to Receive Corresponding Interconnect Elements of a Microfeature Device

Claim 17 is directed to a test socket for receiving a microfeature device having a substrate and a plurality of interconnect elements projecting from the substrate. The test socket includes a recess having a lead-in surface and a support surface. The support surface includes a plurality of open apertures positioned to receive corresponding interconnect elements of the microfeature device. The individual open apertures extend through the test socket and have a cross-sectional dimension less than a cross-sectional dimension of the interconnect elements so that the substrate is spaced apart from the support surface when the microfeature device is received in the recess.

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2. Sato Discloses a Semiconductor Device Socket Including a Positioning Member Having a Bottom Surface With a Large Hole

Sato discloses a semiconductor device socket including (a) a positioning member having a generally flat bottom surface with a large hole, and (b) multiple pairs of movable contacts at the hole. In operation, a semiconductor device with a plurality of electrodes is placed on the positioning member so that the perimeter of the device contacts the bottom surface and the electrodes are received in the hole. The pairs of movable contacts are then moved so that each pair of contacts grasps a corresponding electrode.

3. Akram Discloses an Insert for Testing Chip-Scale-Packaged Microelectronic Devices

The discussion of Akram herein addresses the relevant embodiments disclosed in the specification and figures of Akram, and in no way is a characterization or interpretation of the claims in Akram. The claims in Akram, moreover, are expressly not limited to the embodiments disclosed in the specification of Akram. Therefore, the claims in Akram are to be interpreted without reference to this paper.

Akram discloses an insert for testing a microelectronic device having a ball-grid-array of outwardly-projecting contacts (e.g., solder balls). In the embodiment illustrated in Figure 29, the insert includes a first side, a second side opposite the first side, a plurality of pockets at the first side that are generally aligned with corresponding contacts, and a plurality of conductive segments extending between corresponding pockets and the second side.

4. Sato and Akram Fail to Disclose or Suggest a Test Socket Including a Support Surface Having a Plurality of Open Apertures Positioned to Receive Corresponding Interconnect Elements of a Microfeature Device

The combination of Sato and Akram fails to disclose or suggest a test socket having, *inter alia*, a "support surface including a plurality of open apertures positioned to receive corresponding interconnect elements of the microfeature device, wherein the individual open apertures extend through the test socket," as recited in claim 17. In the Office Action, the Examiner correctly noted that Sato fails to disclose "a plurality of apertures positioned to receive corresponding interconnect elements of the microfeature device." (Office Action, p. 3.) The Examiner alleges, however, that "Akram et al teach (fig. 29) a plurality of apertures (16)

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positioned to receive corresponding interconnect elements (14) of the microfeature device (12), wherein the individual aperture (16) extend through the test socket (10)." (Office Action, pp. 3-4.) This assertion, however, is not correct. In Figure 29, Akram discloses an insert with a plurality of pockets 16 extending from the first side to an intermediate depth, and a plurality of conductive segments extending from corresponding pockets 16 to the second side of the insert 10. As such, Akram's pockets cannot correspond to the open apertures of claim 17 because the pockets do not extend completely through the insert as required by claim 17. Moreover, the combination of Akram's pockets and Akram's conductive segments cannot correspond to the open apertures of claim 17 because the conductive segments are not open apertures as recited in claim 17. Therefore, the combination of Sato and Akram fails to disclose or suggest a plurality of open apertures that extend through a test socket. Accordingly, the Section 103(a) rejection of claim 17 should be withdrawn.

Claims 18-23 and 25 depend from claim 17. Accordingly, the Section 103(a) rejection of claims 18-23 and 25 should be withdrawn for at least the reasons discussed above with reference to claim 17 and for the additional features of these claims.

Independent claim 26 has, *inter alia*, features generally similar to the features of claim 17. Accordingly, the Section 103(a) rejection of claim 26 should be withdrawn for at least the reasons discussed above with reference to claim 17 and for the additional features of claim 26.

Claims 27-31 depend from claim 26. Accordingly, the Section 103(a) rejection of claims 27-31 should be withdrawn for at least the reasons discussed above with reference to claim 26 and for the additional features of these claims.

Independent claim 32 has, *inter alia*, features generally similar to the features of claim 17. Accordingly, the Section 103(a) rejection of claim 32 should be withdrawn for at least the reasons discussed above with reference to claim 17 and for the additional features of claim 32.

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Claims 33-36 depend from claim 32. Accordingly, the Section 103(a) rejection of claims 33-36 should be withdrawn for at least the reasons discussed above with reference to claim 32 and for the additional features of these claims.

Independent claim 37 has, *inter alia*, features generally similar to the features of claim 17. Accordingly, the Section 103(a) rejection of claim 37 should be withdrawn for at least the reasons discussed above with reference to claim 17 and for the additional features of claim 37.

B. Allowed Claim 24

Although the applicants' attorney agrees with the Examiner's conclusion that claim 24 is allowable, the applicants' attorney notes that the claim may be allowable for reasons other than those identified by the Examiner and does not concede that the Examiner's characterization of the terms of the claim and the prior art are correct.

C. Conclusion

In view of the foregoing, the pending claims comply with 35 U.S.C. § 112 and are patentable over the applied art. The applicants accordingly request reconsideration of the application and a Notice of Allowance. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call David Dutcher at (206) 359-6465.

Respectfully submitted,

Perkins Coie LLP



David T. Dutcher
Registration No. 51,638

Date: 10/11/06

Correspondence Address:

Customer No. 25096

Perkins Coie LLP

P.O. Box 1247

Seattle, Washington 98111-1247

(206) 359-8000